AMENDMENTS TO THE DRAWINGS:

Please find accompanying this response replacement sheets for Figs. 5, 6, and 15-26, wherein amendments explained in the Remarks presented below are effected.

REMARKS

Claims 1-4 and 6-42 remain pending in this application. Claims 2-4, 7-12, 15, 17, 22-24, 26-29, 31-36, 39 and 41 are withdrawn. Claims 1, 5, 6, 13, 14, 16, 18-21, 25, 30, 37, 38, 40 and 42 were rejected. Claims 1, 5, 6 13-14, 19-21 and 25, and the specification, were objected to. Claim 5 is cancelled herein. Claims 1, 6, 13, 14, 16, 18-21, 25, 30, 37, 38, 40 and 42 are amended herein to clarify the invention. Figures 5, 6 and 15-26 have been revised. No new matter has been added.

In light of the amendments to the claims and specification herein, applicant submits that the objections have now been overcome.

In paragraph 9 of the Action, the Examiner rejected claims 1, 5-6, 13-14, 16, 18-21, 25, 30, 37-38, 40 and 42 under 35 U.S.C. 103(a) as allegedly being unpatentable over Kondo European Patent Application No. 1,156,342. Applicant respectfully traverses this rejection.

With respect to Claim 1: (a) a distinctive feature of the claimed invention is that the resistor elements of which cylindrical outer tube and high-voltage proof

insulating sleeves have no fins and are extractably anchored. This shows favorable effect which "Kondo" has not as follows;

(b) That is the form of cylindrical outer tube without any spiral fins does not constitute an obstacle to the circulation of air and allows air to circulate smoothly to the uppermost part or the back of the vertical or horizontal rectangular frame box of the high-voltage resistor apparatus and a good draft can be maintained by means of a cooling fan. Thus, good and sufficient heat radiation can be obtained and vibrations can be suppressed, and therefore, it is not neccesary to provide isolation rubers 46 like "Kondo" (Fig. 7A).

(c) Due to the absence of protruding tip peak edge like spiral fins, the preventive effect of arc discharge enhance, dielectric strength increases, the risk of dielectric breakdown can be avoided, and further dielectric breakdowns can be prevented by fixing the resistor elements on their supports through high withstand voltage insulating sleeve provided thereon. This eliminates the necessity of setting isolator 51 like Kondo (Fig. 7A).

(d) In addition, due to the absence of spiral fins, it is possible to miniaturize the rectangular frame box and good perspective within the rectangular frame box can be obtained from the above or from behind. And, the possibility of easily drawing

various resistor elements out of the rectangular frame box by removing the spring grooved retaining rings is very convenient for the maintenance, inspection and repair works at the site.

(e) To the extent that the vehicle mount-type high-voltage load system apparatus is made smaller and more compact, and insulators for insulating the rectangular frame box and rubber cushions are no longer necessary, the center of gravity of the rectangular frame box can be lowered, and the falling down angle of vehicles can be expanded to realize a large falling down angle. Vehicles having a large falling down angle can control their rotation while running at a high speed and control their falling down on poor roads, and they can reduce their height, they are less subject to rolling due to side wind. Dry-type high-voltage load system apparatuses are sometimes transported over a one-way distance of 1,000 km or more, and the improvement of their transportability has the effect of mitigating the physical and mental burden of drivers.

(f) On the other hand, since the barrel body 59 in the resistor elements rj which are described in Kondo has the spiral radiating fins 60 around that outer perioheral surface ([0042], Fig. 9A), the dry load test apparatus described in Kondo has no effect such as those provided by the claimed invention. That is, Kondo's

apparatus is inferior in the effect of heat radiation, the prevention of vibrations and isolation to the claimed invention and the isolation rubber 46 and the isolator 51 are indispensable to Kondo's apparatus ([0036], [0037], Fig 7A). The space as a result of placing the isolation rubber 46 and the isolator 51 between the unit and the fan as in Kondo causes dissipation of the ventilation wind from the fan. This impedes cooling within the unit. And, the shape of the fins prevents thermal dispersion from the unit and resists air circulation therein, which can generate turbulence within the unit and does not stop vibrations of the load test apparatus. This can cause electrical breakdowns, failures and accidents in the load test apparatus. And, because the isolation member 66 are fixed in the barrel body 59 ([0046]), replacement and repair works of the resistor elements rj cannot be carried out at site.

(g) In addition, since the dielectric materials (isolation menbers) 64 contained in the barrel body 59 described in Kondo are magnesia and the like ([0043]) and considered to be a powder material, the resistor elements rj have a risk of dielectric breakdown due to non-uniform pressure acting on a coating of the resistor line 63 resulting from uneven distribution of powder caused by vibration and the powdery insulating material led to many shortcomings such as causing the red hot resistor line 63 in operation to vibrate easily, becoming liable to disconnect and insufficient

thermal insulation capacity. On the other hand, the insulating material in the resistor element according to the present invention used in a solid state has no such risk and can coat the encased resistive heat-generating wire in an earthquake-proof manner.

(h) Thus, the resistor element of the present invention described in claim 1, is quite different from the resistor element disclosed in Kondo. In addition, the claimed invention brings out a beneficial effect compared with the invention disclosed in Kondo. Thus, the Applicant believes the Examiner incorrectly rejected the claimed invention for obviousness over Kondo.

2. As for Claims 5, 6, 13, 14, 16, 18-21 and 25, these claims depend on Claim 1 and as such contain the limitations of Claim 1 and are therefore not anticipated or rendered obvious by the cited reference .

3. As for Claim 30, this claim is a method claim which corresponds to the apparatus claim (claim 1) and is therefore not anticipated or rendered obvious by the cited reference.

4. As for Claims 37, 38, 40 and 42, these claims depend on Claim 30 and as such contain the limitations of Claim 30 and are therefore not anticipated or rendered obvious by the cited reference.

The resistor element of the present invention is the same composition as the High-Voltage Registor Element in U.S. Patent No. 7,218,201 submitted as an IDS.

REQUEST FOR EXTENSION OF TIME

Applicant respectfully requests a three month extension of time for responding to the Office Action. The fee of $525.00 (Small Entity) for the extension is provided for in the charge authorization presented in the PTO Form 2038, Credit Card Payment form, provided herewith.

If there is any discrepancy between the fee(s) due and the fee payment authorized in the Credit Card Payment Form PTO-2038 or the Form PTO-2038 is missing or fee payment via the Form PTO-2038 cannot be processed, the USPTO is hereby authorized to charge any fee(s) or fee(s) deficiency or credit any excess payment to Deposit Account No. 10-1250.

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited.

Respectfully submitted,

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Enc: Replacement drawing sheets of Figs. 5, 6 and 15-25

PTO Form-2038